



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/730,066	12/05/2000	Teppo J.M. Heima	442-009953-US(PAR)	9395

7590 08/18/2003
Perman & Green
425 Post Road
Fairfield, CT 06430-6232

EXAMINER

DHARIA, PRABODH M

ART UNIT	PAPER NUMBER
----------	--------------

2673

DATE MAILED: 08/18/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/730,066

Applicant(s)

HEMIA ET AL.

Examiner

Prabodh M Dharia

Art Unit

2673

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 July 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Art Unit: 2673

1. **Status:** Receipt is acknowledged of papers submitted on July 30, 2003 under request to reconsider which have been placed of record in the file. Claims 1-18 are pending in this action.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-7, are rejected under 35 U.S.C. 103(a) as being unpatentable over by Kikinis (5,220,521) in view of Bowen (5,644,338).

Regarding Claim 1, Kikinis teaches an electronic input device (Col. 1, Lines 6,7) comprising: a flexible input (Col. 1, Lines 32,33, Col. 2, Line 15) means for receiving user input; and a housing defining a space for accommodating the input means (Col. 2, Lines 7-10, Lines 41,42); wherein: the electronic input device has a first state, a second state and third state; and wherein the flexible input means adopts a compacted spatial configuration in the first state and adopts a partly extended spatial configuration in the second state (Col. 2, Lines 41,42, Lines 53-56).

However, Kikinis fails to teach the electronic input device is configured to be moved from the first state into the second state by movement of a first portion of the electronic input device in relation to a second portion of the electronic input device in a first direction, and the electronic input device is configured to be moved from the second state into the third state by a

Art Unit: 2673

sliding movement of a third portion of the electronic input device in a second direction being different than the first direction, and wherein in the second state the flexible input means adopts a partly extended spatial configuration and at least part of the functionality of the electronic input device is available for a user, and in the third state the flexible input means adopts a fully extended spatial configuration and the available functionality is extended.

However, Bowen teaches the electronic input device (Col. 2, Lines 14-28) is configured to be moved from the first state into the second state by movement of a first portion of the electronic input device in relation to a second portion of the electronic input device in a first direction (Abstract, figure 1,5, Col. 2, Lines 24-28, Lines 55-59, Col. 14, Lines 30-36, Col. 2, Lines 55-62), and the electronic input device is configured to be moved from the second state into the third state by a sliding movement of a third portion of the electronic input device in a second direction being different than the first direction (Abstract, figure 4, Col. 13, Line 65 to Col. 14, Line 4, Col. 2, Lines 55-62), wherein in the second state at least part of the functionality of the electronic input device is available for a user (Abstract, Col. 2, Lines 55-62, figure 17, Col. 8, Lines 17-41, Col. 7, Lines 46-54), and in the third state the available functionality is extended (figure 15,16, Col. 8, Lines 17-19, Lines 34-38).

Thus it is obvious to one in the ordinary skill in the art at the time of invention was made to incorporate Bowen teaching in teaching of Kikinis to be able to meet the demand of portability and size.

Regarding Claim 2, Kikinis teaches the input means has an input surface having touch sensitive areas (Col. 2, Lines 17-20).

Art Unit: 2673

Regarding Claim 3, Kikinis teaches the extended spatial configuration is planar (Col. 2, Lines 25-27)

Regarding Claim 4, Kikinis teaches the compacted spatial configuration is non-planar (Col. 2, Lines 25-27).

Regarding Claim 5, Kikinis teaches the compacted spatial configuration the input means is wound into a roll (Col. 2, Lines 7-10, Lines 25-27).

Regarding Claim 6, Kikinis teaches for moving the input means between the first and second configurations (Col. 2, Lines 7-10, Lines 25-27).

Regarding Claim 7, Kikinis teaches the input means is a keyboard (Col. 1, Lines 6,7, Lines 32,33).

4. Claims 8-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kikinis (5,220,521) in view of Bowen (5,644,338) as applied to claims 1-7 above, and further in view of Kinya et al. (JP 4178684 A).

Regarding Claim 8, Kikinis modified by Bowen teaches the input means is a keyboard (Col. 1, Lines 6,7, Lines 32,33,) and output means is a display (Col. 7, Lines 65,66).

However, Kikinis modified by Bowen fails to teach the input means is also a display.

Art Unit: 2673

However, Kinya et al. teaches the input means is also a display (Page 9, paragraph 32, Lines 8-10).

Thus it is obvious to one in the ordinary skill in the art at the time of invention was made to incorporate Kinya et al. teaching in teaching of Kikinis modified by Bowen to be able to meet the demand of portability and size.

Regarding Claim 9, Kinya et al. teaches a flexible output means for outputting information; and a housing defining a space for accommodating the output means; wherein the input device has a first state and a second state; and the output means adopts a compacted spatial configuration in the first state and adopts an extended spatial configuration in the second state (Page 7, paragraph 5, page 9, paragraph 32, Lines 4-10).

Regarding Claim 10, Kinya et al. teaches the output means is a display (page 9, paragraph 32, Lines 6,7).

Regarding Claim 11, Kinya et al. teaches the output means is arranged parallel with the input means so that the input device has two states corresponding to the first and second states of both input means and output means (page 9, paragraph 32, Lines 4-11).

5. Claims 12-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kikinis (5,220,521) in view of Bowen (5,644,338) and Kinya et al. (JP 4178684 A) as applied to claims 8-11 above, and further in view of Furuya et al. (JP 06164440 A).

Art Unit: 2673

Regarding Claim 12, Kikinis modified by Bowen and Kinya et al. teaches the housing defining a space for accommodating input means (Kikinis, Col. 2, Lines 7-10, Lines 25-27) and the space for accommodating the output means a hinge (Kinya et al. page 9, paragraph 32, Lines 4-11).

However, Kikinis modified by Bowen and Kinya et al. fails to teach foldingly connecting the housing defining to a hinge for an input and output device space.

However, Furuya et al. teaches foldingly connecting the housing defining to a hinge for an input and output device space (page 6, paragraph 9, page 7, paragraph 12).

Thus it is obvious to one in the ordinary skill in the art at the time of invention was made to incorporate Furuya et al. teaching in teaching of Kikinis modified by Bowen and Kinya et al. to be able to meet the demand of portability and size.

Regarding Claim 13, Kinya et al. teaches the electronic input device is a telecommunications device (page 9, paragraph 32, Lines 1-11).

Regarding Claim 14, Furuya et al. teaches two elements, which are foldable about a hinge between an open configuration and a closed configuration; a speaker located in one element, and a microphone in another element so that the electronic input device can be unfolded to separate the microphone and the speaker (page 6, paragraph 9).

Regarding Claim 15, Kinya et al. teaches a stop to resist opening the two elements of the input device over a certain maximum opening angle; and means for changing the maximum opening angle when the configuration of the device is changed between the compacted spatial

Art Unit: 2673

configuration and the extended spatial configuration (page 8, paragraph 26, page 9, paragraph 29, 30).

6. Claims 16,17,18, are rejected under 35 U.S.C. 103(a) as being unpatentable over Kinya et al. (JP 4178684 A) in view of Bowen (5,644,338).

Regarding Claims 16,17, Kinya et al. teaches a method for manufacturing of an electronic input device comprising: forming to the electronic input device a housing to define a space for accommodating a flexible input means; shaping the flexible input means into a compacted spatial configuration and inserting the flexible input means at least partially into the space so that the flexible input means maintains the compacted spatial configuration in a first state of the electronic input device (page 9, paragraph 32); adopts a partly extended spatial configuration in a second state of the electronic input device (page 7, paragraph 5, page 9, paragraph 32), and adopts a fully extended spatial configuration in a third state of the electronic input device (page 7, paragraph 5, page 9, paragraph 32).

However, Kinya et al. fails to teach the electronic input device is configured to be moved from the first state into the second state by movement of a first portion of the electronic input device in relation to a second portion of the electronic input device in a first direction, and the electronic input device is configured to be moved from the second state into the third state by a sliding movement of a third portion of the electronic input device in a second direction being different than the first direction, and wherein in the second state the flexible input means adopts a partly extended spatial configuration and at least part of the functionality of the electronic input

Art Unit: 2673

device is available for a user, and in the third state the flexible input means adopts a fully extended spatial configuration and the available functionality is extended.

However, Bowen teaches the electronic input device (Col. 2, Lines 14-28) is configured to be moved from the first state into the second state by movement of a first portion of the electronic input device in relation to a second portion of the electronic input device in a first direction (figure 1,5, Col. 2, Lines 24-28, Lines 55-59, Col. 14, Lines 30-36), and the electronic input device is configured to be moved from the second state into the third state by a sliding movement of a third portion of the electronic input device in a second direction being different than the first direction (Abstract, figure 4, Col. 13, Line 65 to Col. 14, Line 4, Col. 2, Lines 55-62), wherein in the second state at least part of the functionality of the electronic input device is available for a user (figure 17, Col. 8, Lines 17-41, Col. 2, Lines 55-62, Abstract, Col. 2, Lines 55-62, Col. 7, Lines 46-54), and in the third state the available functionality is extended (figure 15,16, Col. 8, Lines 17-19, Lines 34-38).

Thus it is obvious to one in the ordinary skill in the art at the time of invention was made to incorporate Bowen teaching in teaching of Kinya et al. to be able to meet the demand of portability and size.

Regarding Claim 18, Kinya et al. teaches a method of an electronic input device presenting a user interface (page 9, paragraph 32), comprising the steps of: storing a flexible input means in a compacted spatial configuration within a housing of the electronic input device in a first state of the electronic input device (page 9, paragraph 32); extending the flexible input means out of the housing into one or more of a partly extended spatial configuration in a second

Art Unit: 2673

state of the electronic input device (page 7, paragraph 5, page 9, paragraph 32), and a fully extended spatial configuration in a third state of the electronic input device (page 7, paragraph 5, page 9, paragraph 32), the partly and fully extended spatial configurations for receiving user input (page 7, paragraph 5, page 9, paragraph 32); and retrieving the flexible input means again into the compacted spatial configuration within the housing, for receiving user input (page 7, paragraph 5, page 9, paragraph 32).

However, Kinya et al. fails to teach the electronic input device is configured to be moved from the first state into the second state by movement of a first portion of the electronic input device in relation to a second portion of the electronic input device in a first direction, and the electronic input device is configured to be moved from the second state into the third state by a sliding movement of a third portion of the electronic input device in a second direction being different than the first direction, and wherein in the second state the flexible input means adopts a partly extended spatial configuration and at least part of the functionality of the electronic input device is available for a user, and in the third state the flexible input means adopts a fully extended spatial configuration and the available functionality is extended.

However, Bowen teaches the electronic input device (Col. 2, Lines 14-28) is configured to be moved from the first state into the second state by movement of a first portion of the electronic input device in relation to a second portion of the electronic input device in a first direction (figure 1,5, Col. 2, Lines 24-28, Lines 55-59, Col. 14, Lines 30-36), and the electronic input device is configured to be moved from the second state into the third state by a sliding movement of a third portion of the electronic input device in a second direction being different than the first direction (Abstract, figure 4, Col. 13, Line 65 to Col. 14, Line 4, Col. 2, Lines 55-

Art Unit: 2673

62); wherein in the second state at least part of the functionality of the electronic input device is available for a user (Abstract, figure 17, Col. 8, Lines 17-41, Col. 2, Lines 55-62, Col. 7, Lines 46-54), and in the third state the available functionality is extended (figure 15,16, Col. 8, Lines 17-19, Lines 34-38).

Thus it is obvious to one in the ordinary skill in the art at the time of invention was made to incorporate Bowen teaching in teaching of Kinya et al. to be able to meet the demand of portability and size.

Response to Arguments

7. Applicant's arguments filed 07-30-2003 have been fully considered but they are not persuasive.

Applicant argues the cited references fail to teach the electronic input device is configured to be moved from the second state into the third state by a sliding movement of a third portion of the electronic input device, in a second direction being different than the first direction. The flexible input means adopts a partly extended spatial configuration, and at least part of the functionality of the electronic input device is available for a user, as recited in claim 1.

Examiner disagrees, as Bowen teaches the compacted state of the input device where the device has been folded and slid-in to make it compacted, second state where it is unfolded and partial input device is visible, and accessible to user and third state where the sliding part is slid-out to completely un-compact the input device (Col. 7, Lines 46-54, Col. 8, Lines 17-41).

• Art Unit: 2673

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Applicant is informed that all of the other additional cited references render the claims obvious.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Prabodh Dharia whose telephone number is (703) 605-1231. The examiner can normally be reached Monday- Friday from 8:00 AM to 5:00 PM.

If attempts to reach examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala, can be reached at (703) 305-4938. The fax number of the group is (703) 872-9314.

• Art Unit: 2673

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-4750.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

PD

AU2673

August 7, 2003


Amare Mengistu
Primary Examiner